

SYSTEM AND METHOD FOR ADAPTIVE SOFTWARE TESTING

ABSTRACT

- 5 A system and method for mapping software components (e.g., source files, binary files, modules) to test cases that test the components and providing rating information regarding each test case's effectiveness against its tested components. Each test case is applied to test a corresponding subset of the components, during which data are gathered (e.g., amount or elements of a component that were
- 10 tested, which components were tested, time). Each test case is applied separately so that correlations between each test case and the corresponding subset of the software components can be recorded (and vice versa). A rating is generated to indicate how completely or effectively a test case covers a software component. A bipartite graph and/or other data structures may be constructed to map test cases
- 15 to the software components they test, and vice versa.